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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/651,849	08/29/2003	Paul M. Henry	50019.242US01/P05640	8150
23552	7590	04/12/2006	EXAMINER	
MERCHANT & GOULD PC P.O. BOX 2903 MINNEAPOLIS, MN 55402-0903			CUNNINGHAM, TERRY D	
			ART UNIT	PAPER NUMBER
			2816	

DATE MAILED: 04/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action
Before the Filing of an Appeal Brief**

Application No.

10/651,849

Applicant(s)

HENRY, PAUL M.

Examiner

Terry D. Cunningham

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--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 24 March 2006 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☐ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☐ The period for reply expires _____ months from the mailing date of the final rejection.
b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
(a) ☒ They raise new issues that would require further consideration and/or search (see NOTE below);
(b) ☐ They raise the issue of new matter (see NOTE below);
(c) ☒ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: See Attachment. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): _____.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☐ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
The status of the claim(s) is (or will be) as follows:
Claim(s) allowed: 10-12, 14 and 21.
Claim(s) objected to: 5-9.
Claim(s) rejected: 1-4, 13 and 15-20.
Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Attachment.
12. ☒ Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). 03/24/06
13. ☐ Other: _____.

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ATTACHMENT TO ADVISORY ACTION***Continuation of No. 3***

Comments in Applicant's remarks and the in the included Declaration both contend that there are no new issues changing the scope of the claims. However, Examiner disagrees with these statements. Firstly, the issues concerning the claim terms "band-gap core" and "nulling" will be dealt with below in the response to the Declaration. Beyond these issues, the claims still include a new scope requiring further search and/or consideration. As seen, claim 1 now recites "wherein each respective null control signal is independent of one another". Nowhere is there anything found any previous claim reciting similar scope as proposed claim 1, further including this recited independence. This inclusion alone is enough to deny entry. Further, claim 15 is now seen to recite new limitations for the "first", "second" and "third amplifier means" not found as part of any previously recited claim scope.

Continuation of No. 11

Applicant argues in the remarks that the proposed claim changes do not provide a change in claim scope and relies upon the Declaration filed by the inventor of record. As provided below, the Declaration is not seen sufficient to prove that the proposed claims do not include new issues or that the previous claims of record are allowable over the cited art.

Response to Declaration

A Declaration by inventor Paul Henry was filed 24 March 2006, however, this paper is seen to be unsigned. Since this appears be a bona fide attempt, response is included herein.

In the Declaration, Mr. Henry attempts to establish that the claims are allowable and that the new limitations do not provide a change in claim scope. Examiner disagrees with the ultimate conclusion provided by Mr. Henry as provide hereafter. Applicant first discusses the

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issues regarding the claimed “band-gap core” and submits some references to try to evidence his position. Examiner agrees that the references cited do use the terms “band-gap” and “core” and that references do show circuits that can reasonably be considered each to be a “band-gap core”. However, these are only seen and expressly stated as being mere examples. None of references provide an express definition for the term “band-gap core”. Additionally, none of the references even begin to describe what minimal elements would be required for a circuit to be a “band-gap core”. Applicant states that “a band-gap core” “must necessarily include two bipolar junction transistors (BJTs) and a resistor in a specific configuration”. However, nowhere is such a requirement found to be expressly stated in any of the cited references”. In fact, all of the references show a core with more elements than just these three. Additionally, it is notoriously well-known that a “band-gap” circuit does not even require bipolar transistors. Reference is made to US Patent 6,876,250. In view of this, Examiner maintains that the broadest reasonable interpretation for “band-gap core” is consistent with that provided by Examiner in the history of the case.

Concerning the new language of the claims (e.g., in line 19 of claim 1) stating that “first stage circuit, the second stage circuit and the feedback circuit” is arranged for closed-loop operation with the band-gap core circuit”. Firstly, there is nothing found in the previous claims that could remotely be considered to be consistent with this new language. All that was stated previously was that the “feedback circuit” was for providing “a feedback signal” and such that included a “band-gap core”. Additionally, with respect to the newly recited operation that “ $V_{BE1} = V_{BE2} + \Delta V_{BE}$ ”, Applicant states that “the term ‘band-gap’ does not have any relevant meaning without requiring closed-loop feedback operation such that $V_{BE1} = V_{BE2} + \Delta V_{BE}$ ”. However, no specific evidence has been provided to establish this, particularly in

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light of evidence being provided that two bipolar transistors are not required for a band-gap circuit. Further, it is clear that the claims do not recite a “band-gap” circuit, they recite a “band-gap core”.

Applicant also argues concerning the issue of “nulling” in reference to “amplifier circuits”. Again, none of the references discussed by Mr. Henry are since to expressly provide a definition for “nulling”. Examiner additionally points out that nowhere do the previous claims recite anything concerning “nulling” of the “amplifier circuits”. Claim 1, for example, states that the “nulling control logic circuits” provides “a set of null control signals”. Nowhere does the claim state that the “amplifier circuits” receive the “null control signals”. All that is stated is that the “a respective one of the amplifier circuits” is “zeroed”. Examiner points out that none of the cited references evidence the connection between the operations of “nulling” and being “zeroed” that is discussed by Applicant. For the reasons stated of record, it is deemed reasonable to consider the circuit of Gilbert as “selectively” zeroing the “amplifier circuits”.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Terry Cunningham whose telephone number is 571-272-1742. The examiner can normally be reached on Monday-Thursday from 7:30 to 6:00.


If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Timothy P. Callahan can be reached on 571-272-1740. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

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applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TC
April 10, 2006


Terry D. Cunningham
Primary Examiner
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